III. REMARKS

In the Office Action, objection was made to claims 7, 13, 20 and 21 for reasons set forth in the Action. Also, in the specification, on page 3 at line 27, a misspelled word was to be corrected. It is noted that these matters were attended to in the previous response and, accordingly, it is believed that this portion of the action was copied over from the prior action in error.

Claims 1-4, 7-10, 13-16 and 19-23 were rejected under 35 U.S.C. 102 as being anticipated by Bergstrom (US 5,794,185) for reasons set forth in the Action. Claims 5-6, 11-12 and 17-18 were rejected under 35 U.S.C. 103 as being unpatentable over Bergstrom in view of Steimle (US 6,377,941), and claims 22-23 were rejected under 35 U.S.C. 103 over Bergstrom in view of Agarwal (US 5,729,691) for reasons set forth in the Action.

Is noted that the foregoing rejections based on prior art are repeated from the previous action in view of the examiner's response to applicant's arguments in the prior response (pages 12-14 of the office action).

In particular, it is noted that in the examiner's argument (paragraph linking pages 13 and 14) states that the Bergstrom system contains and anticipates the limitations of the present invention. Apparently, in the examiner's opinion, the language of the present claims does not distinguish adequately between a feature of the present invention and the operation of the Bergstrom system.

In order to emphasize the distinction between the present invention and the operation of the Bergstrom system, the present

claims are amended to show that data from signals input to the system of the present invention are to the stored in a memory of the classifier, rather than using some other data base in anticipation of signals to be received, as is done by Bergstrom. This may be explained further by the following.

In the processing of a stream of input signals applied to an encoding system or decoding system of the present invention, it may appear that there is no suitable prototype stored in the classifier for one of the input signals in the stream. That input signal is then analyzed in a learning phase, and a normalized input pattern of that input signal is stored in the classifier for use as a prototype in the analysis of further input signals in a sequence of input signals following that input signal. Language (a first input signal of a succession of input signals) describing this aspect of the invention has been inserted by amendment into the independent claims to distinguish the invention from Bergstrom who teaches a classifier based on a Multi-Layer Perceptron (MLP) wherein neural weights are derived in an off-line back propagation process (column 5 at line 17). The Bergstrom memory stores speech databases (column 5 at line 13). In other words, the Bergstrom system is prepared ahead of time by storing speech and data before any input speech signals are actually applied to the Bergstrom system. In contrast, in the present invention, the actual input signals being analyzed provide the data to be stored in the classifier to serve as prototypes for analysis of subsequent ones of the input signals.

In the previous response, it was noted that, in the operation of the Bergstrom classifier, the learning phase is completely different from that disclosed in present claim 1 wherein there is a storing of patterns as prototypes. The MLP learning phase

of Bergstrom is accomplished by computing synaptic weights, which is a much more complex process than storing a pattern in a memory. Since internal representation of the teaching performed on MLP differs from the operation of the classifier of the present invention, normalization in the Bergstrom system is also different from normalization in the present invention. The foregoing amendment to the present claims, by emphasizing that it is data from the present input signals that is stored in the classifier for use in analysis of subsequent ones of the input signals, distinguishes over the teaching of Bergstrom who uses data obtained from other sources in the memory of his classifier.

Independent claims 1, 7, 13 and 19-23 have been amended to distinguish the claimed subject matter from the teachings of the cited art, thereby to overcome the rejections of these claims and their respective dependent claims under 35 U.S.C. 102 and 103. The claims are believed to be allowable in view of the foregoing argument. Since this amendment clarifies matters already dealt with by the examiner, it is believed that this amendment should be entered after the Final rejection.

For all of the foregoing reasons, it is respectfully submitted that all of the claims now present in the application are clearly novel and patentable over the prior art of record, and are in proper form for allowance. Accordingly, favorable reconsideration and allowance is respectfully requested. Should any unresolved issues remain, the Examiner is invited to call Applicants' attorney at the telephone number indicated below.

A one month extension of time is to be charged to Deposit Account No. 16-1350, as well as any other fees associated with this communication or any over payment credit.

Respectfully submitted,

8 Sep 2005

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being transmitted by facsimile to (571) 273-8300 the date indicated below, addressed to the Box AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

Date: Sept. 8, 2005 Signature: Meaghan Bayl
Person Making Deposit